CHAPTER 8

Doors

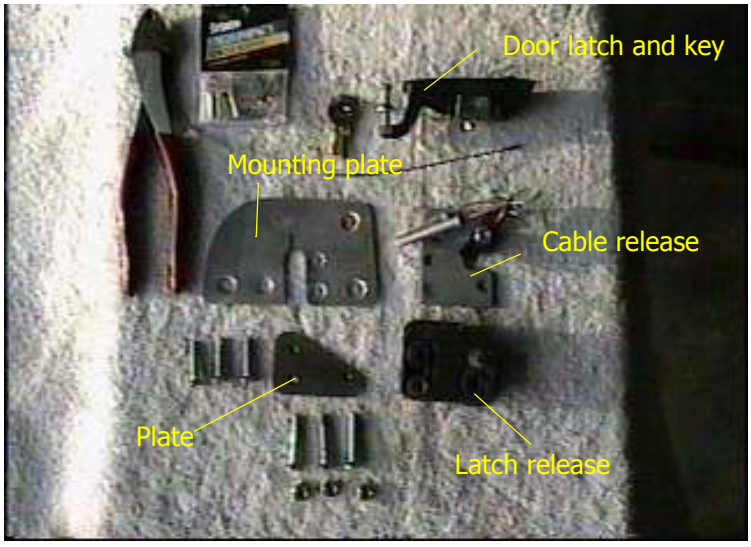
This section deals with the assembly and installation of the frames that fit within the doors as well as how the locking mechanisms are installed in the door.

Components

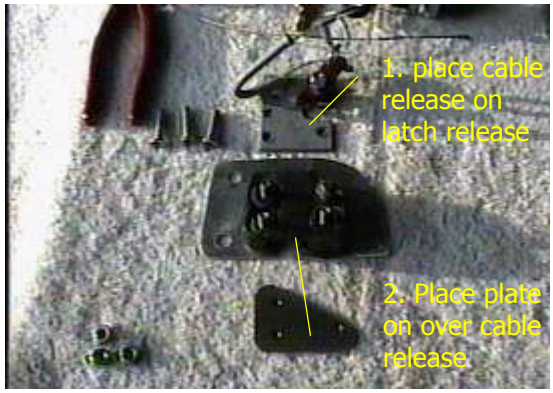
FIGURE 82. **Door outside view and inside view**

Parts for Doors

The latch mechanism requires being assembled from the pieces supplied with the kit



Place the latch release on the plate and insert the screws through the plate and fasten with nuts that were supplied



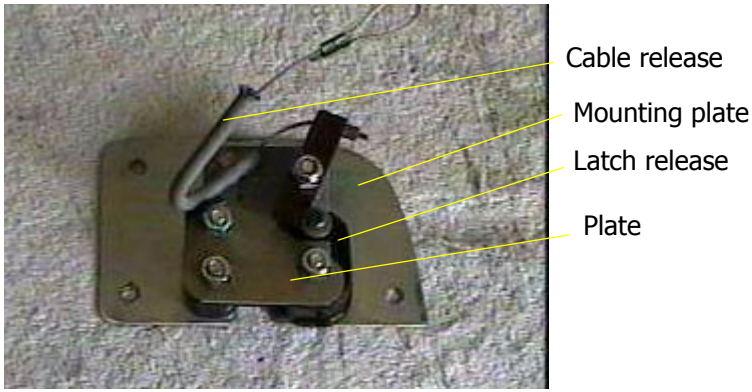


FIGURE 83. Completed latch assembly

This assembly will later be mounted in a cut out in the end of the door and secured by drilling holes through the plate and counter sinking the mounting bolts in the aluminum plate

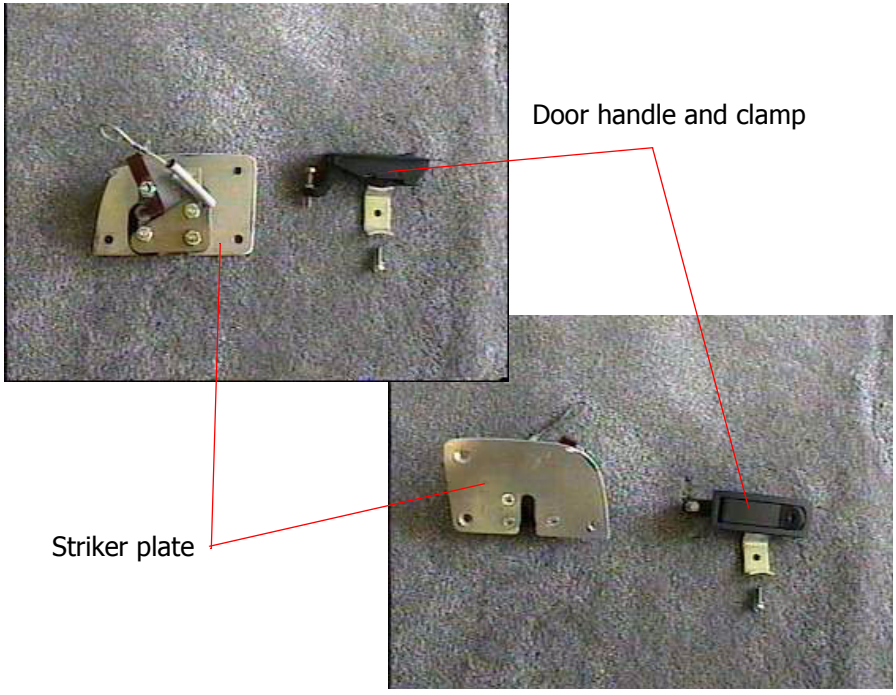
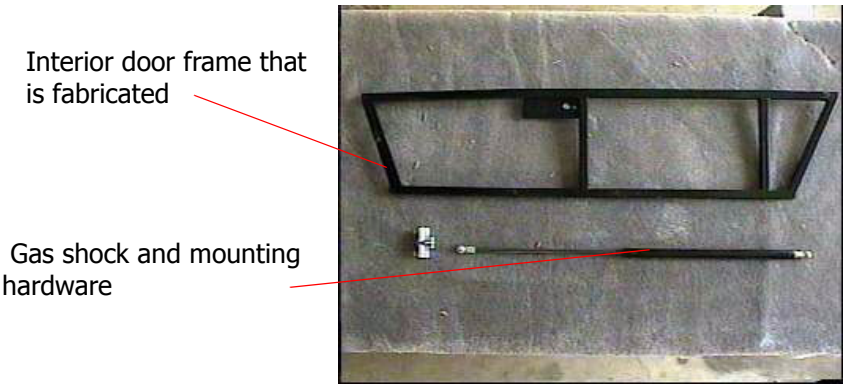


FIGURE 84. Door lock and latch assembly

Door Frame and Shock assembly



Door Frame Assembly

This involves building a subframe out of 3/4" square tube that will be inserted into the door. The end next to the door is connected with a flat bar instead of tube to allow clearance for the shock. This subframe will be attached to the door with 1/4" screws that are countersunk and secured through the fiberglass panels.

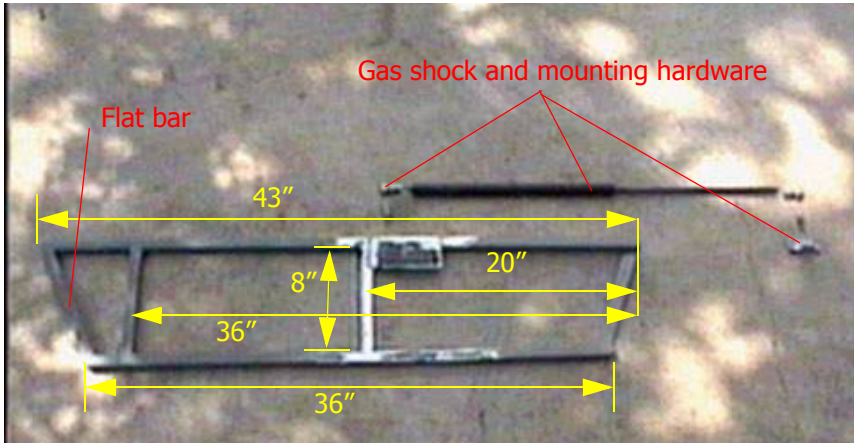


FIGURE 85. Door Frame

The dimensions are approximate and may need to be adjusted for proper fit within the door.

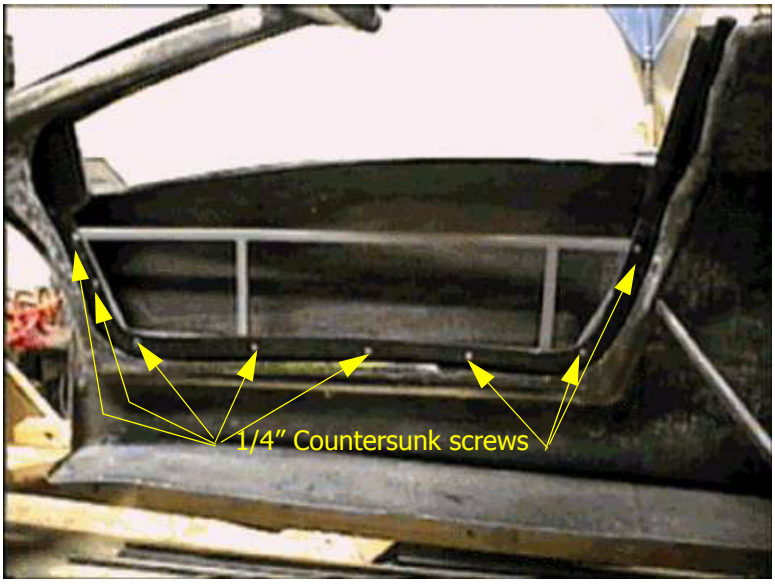


FIGURE 86. **Door frame fastened inside door**

Gas shock attach points

A plate is attached to the frame near the top of the door and the mid point of the door. Several holes can be drilled to allow options in positioning the attach point of the shock. The shock ball may need to be adjusted to clear the window.

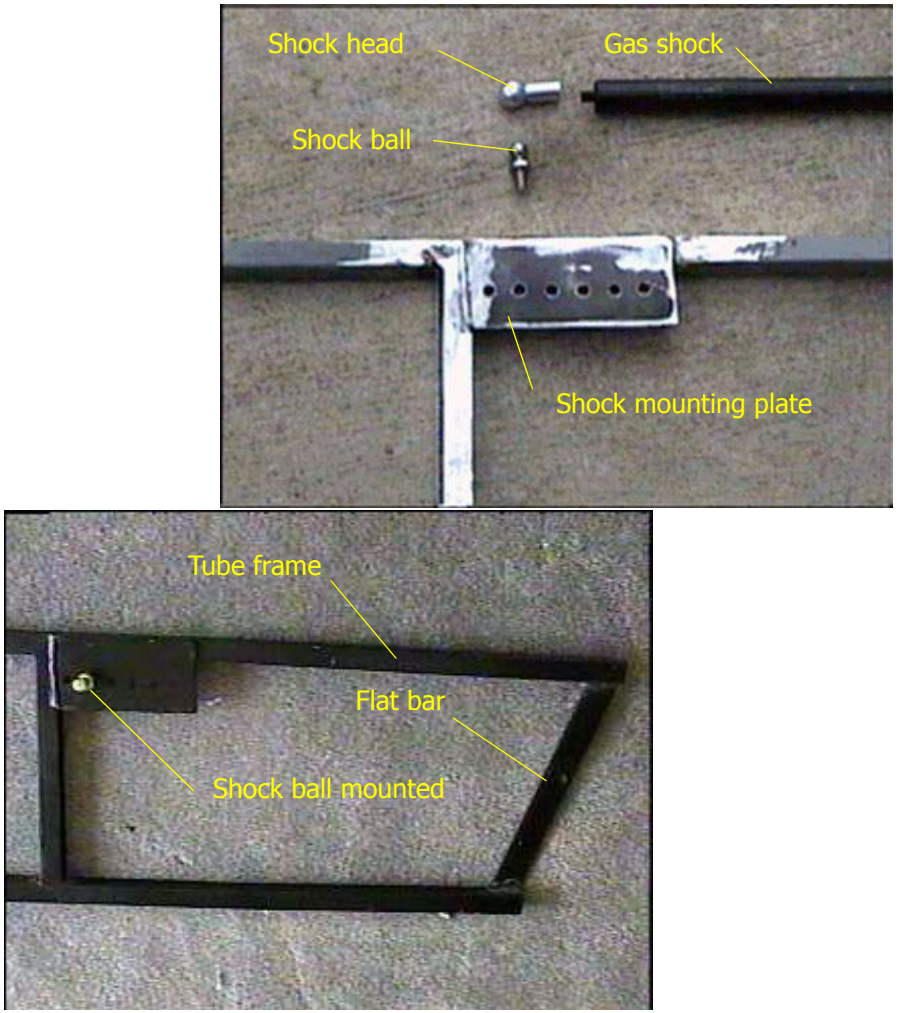


FIGURE 87. Door shock attach point on frame

Shock Plates on Body

When you are first testing the doors without the body being mounted on the chassis, you can simply locate the shock ball assembly on the body. However, once the body is permanently mounted, you will need to reinforce the attach point with a metal plate. This metal plate is created from an 8" square x 1/4" metal plate with a 2" angle iron welded on as an attach point for the body.

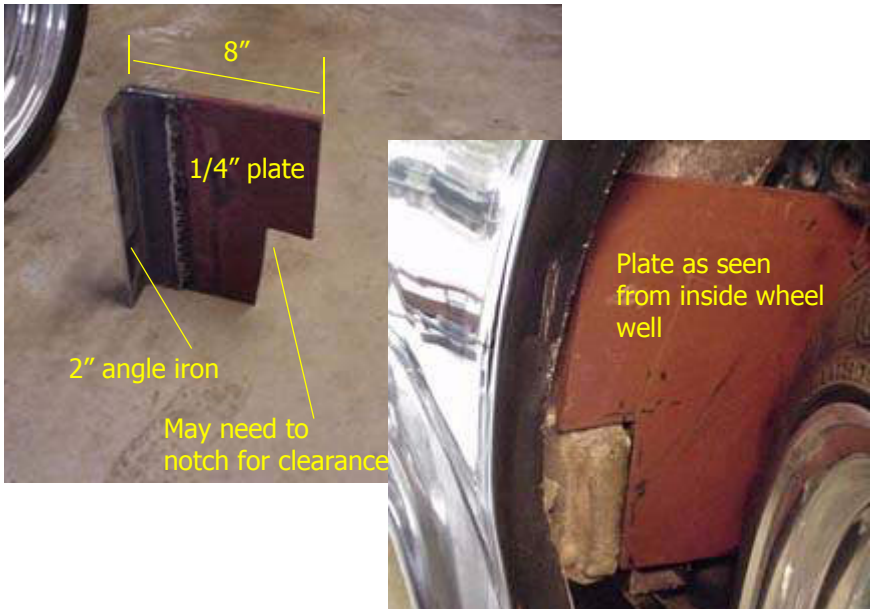
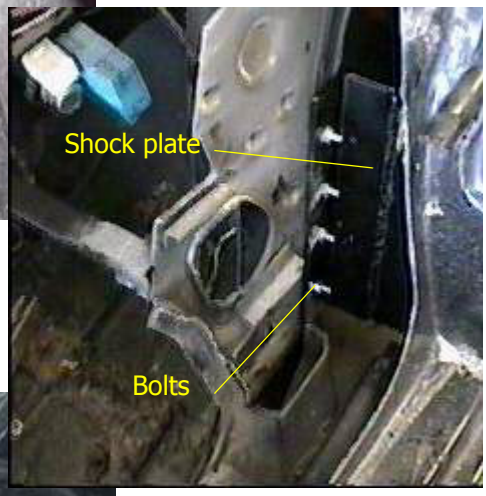


FIGURE 88. Body shock plate mount

The 1/4" plate is drilled and tapped to accept 1/4" x 20 bolts. The plate is fastened to the body by using 5/16" bolts that attach the angle iron through the side plates of the dash.

Trial fit the shock plate by clamping the angle iron to the edge of the dash. Once you are satisfied with the location, drill the holes through the plate and the dash.

The bolts will be covered later with a fiberglass enclosure to seal the area from the interior.



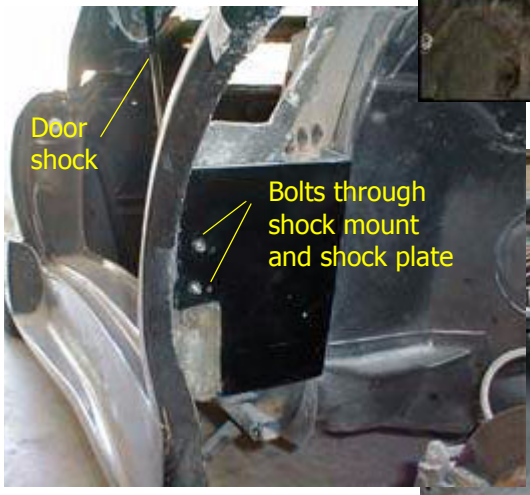


FIGURE 89. Completed body shock plate mount

Door Locks

when constructing the doors, some builders elect not to install the door handles and relay on keyless entry with solenoids and door poppers. We will assume that you have made the decision to use the door handles that were supplied with the kit. This does not mean that you cannot connect a solenoid later to open the door remotely.

It is necessary to cut an opening in the top of the door for the latch. The end of the door must be cut open to accept the latch mechanism.

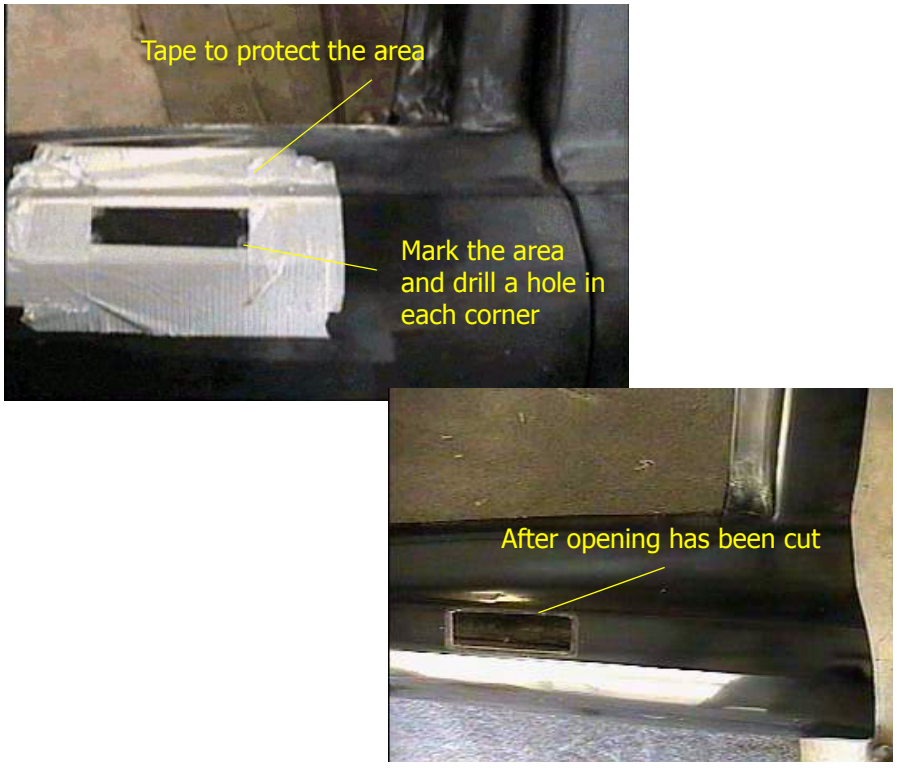
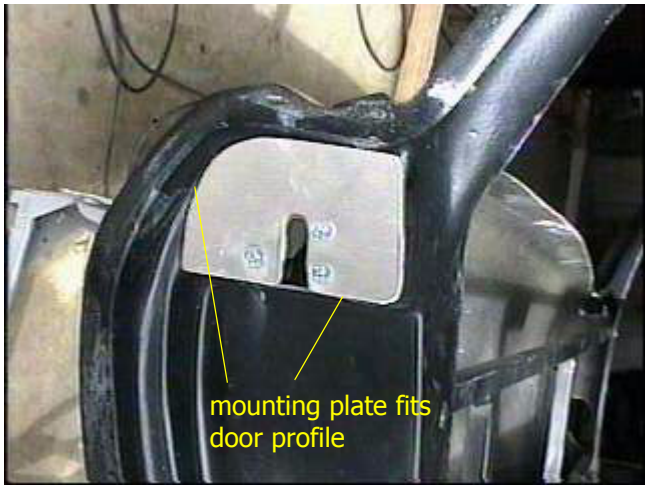


FIGURE 90. Door lock cutout

Install Latch Mechanism

To fasten the door latch mechanism to the door, it is necessary to cut an opening in the end of the door to accept the latch plate.

Once the opening have been cut, trial fit the latch mechanism. The plate should conform to the edge of the door as seen in this picture.



Once the proper positioning has been determined, drill three holes through the plate and the door. Counter sink the plate for the bolts

Be careful not to drill the holds too close to the outer edge as this limits the area inside the door to get the nuts on the bolts

Once the mounting plates are installed, you will need to connect the latch cable mechanism to the door latch. This can be accomplished by drilling a hole in the edge of a large washer and then creating a loop out of cable that connects to the loop on the latch. This allows you to remove the door lock by unscrewing the washer should you need to remove the door lock.

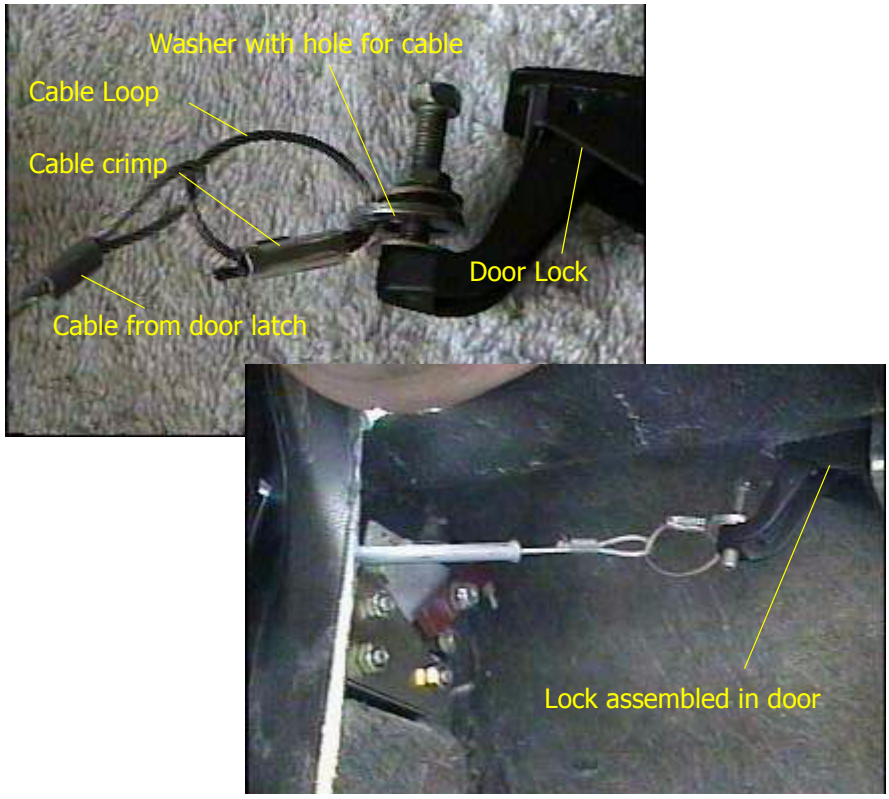


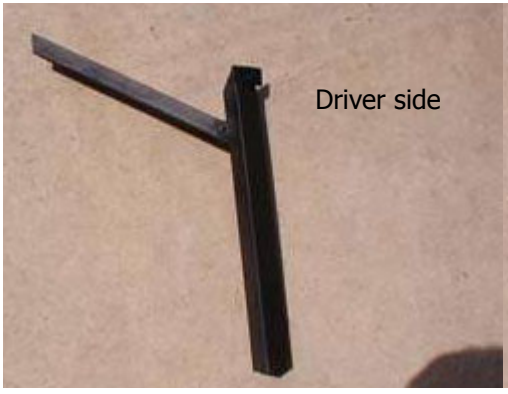
FIGURE 91. Completed door lock assembly

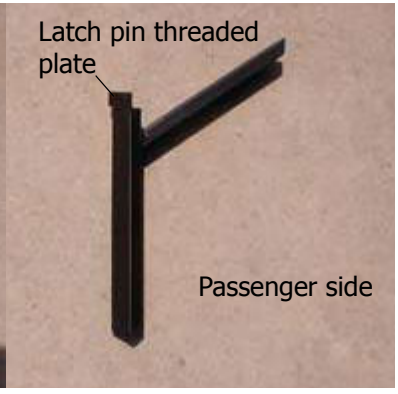
Latch Pin

Once the door latch has been assembled, it will be necessary to mount the latch pin to the body. Initially, this can be installed through the fiberglass in the door sill.

FIGURE 92. Latch Pin

After the body has been mounted, it is a good idea to attach the pin to a metal framework. Here you can see a frame has been fabricated that is welded to the body to support the latch.

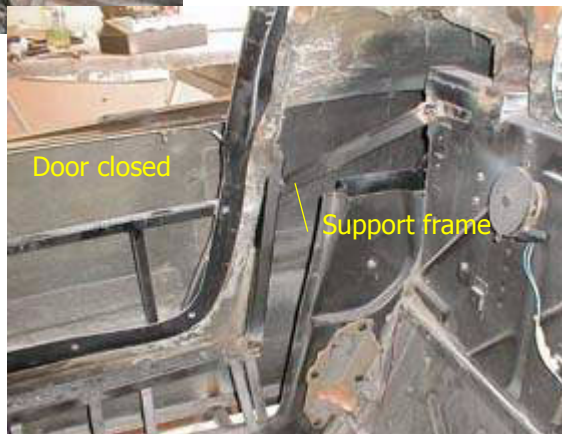




Here you can see how the frame is attached to the body.

Position the frame with the door latch in the proper position and then weld in place.

Support frame is welded to the frame rail attached to the body at the base of the door and to the structure that supports the firewall on the top.

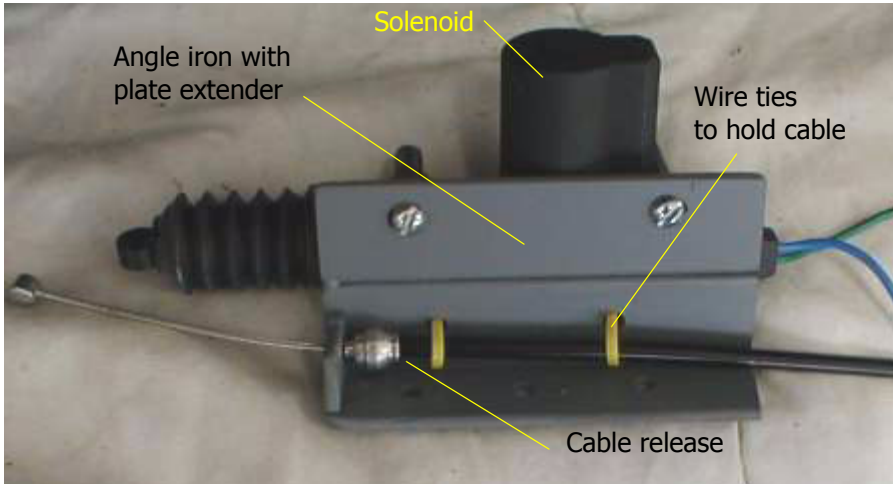


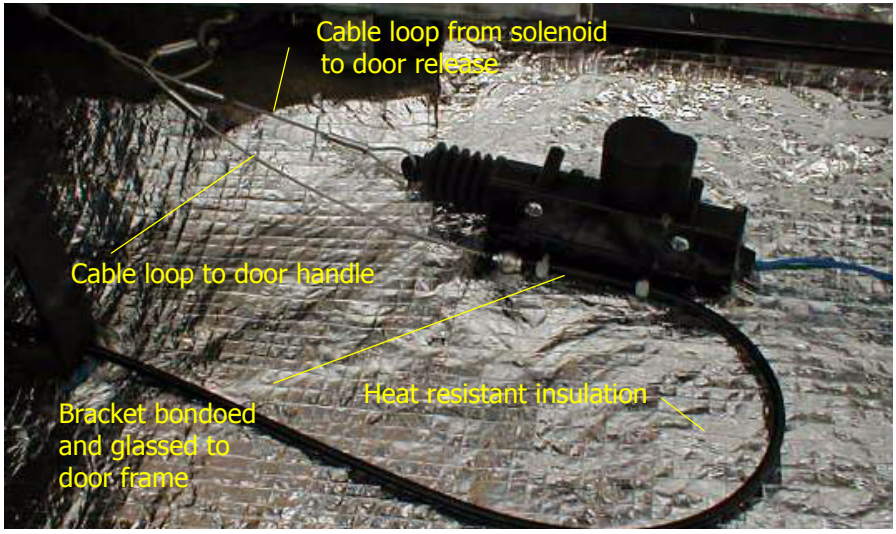
Interior Door Handles

The interior door handles are fastened to the door panels. You may wish to also use a solenoid to release the door handle with a connection to your alarm system.

Door solenoid

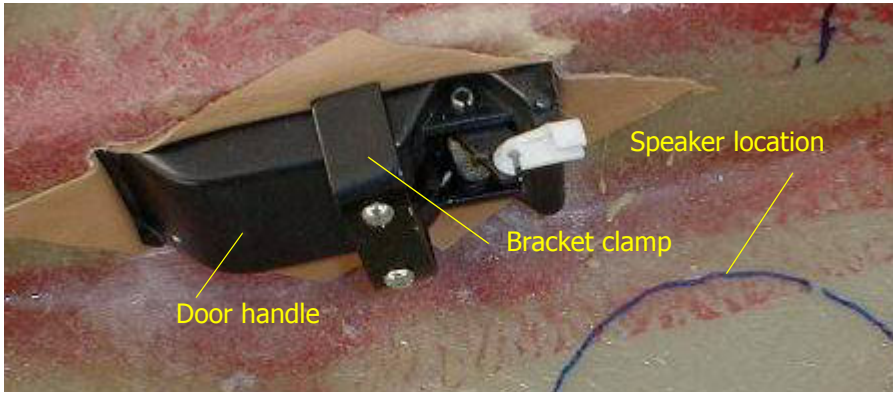
You can fabricate a bracket that will hold both the solenoid and the cable release from the door handle.

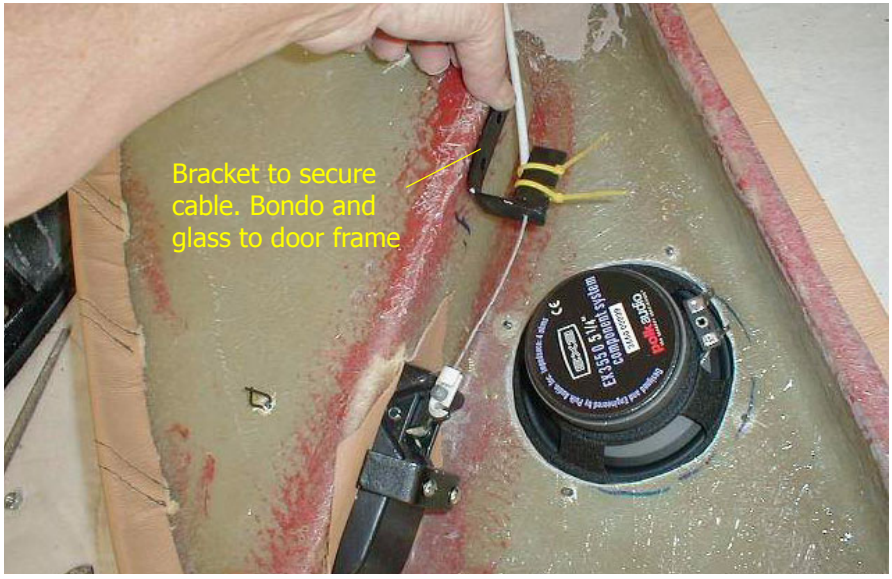




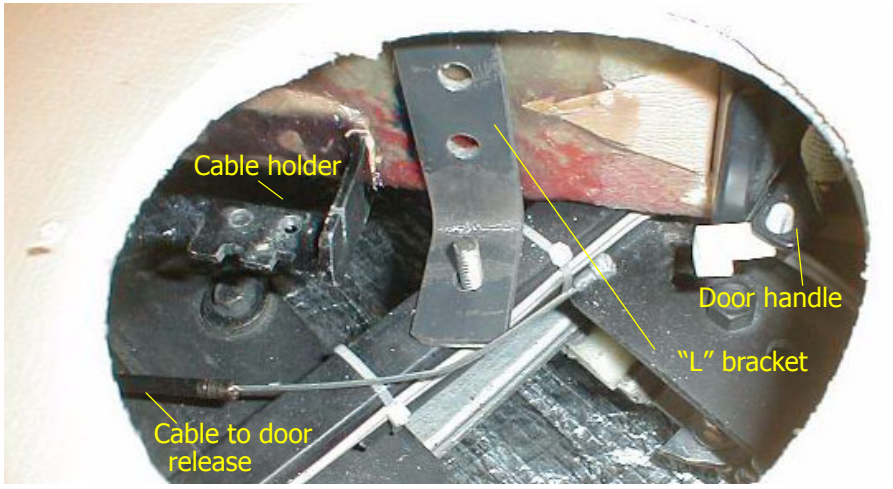
Door cable attachment

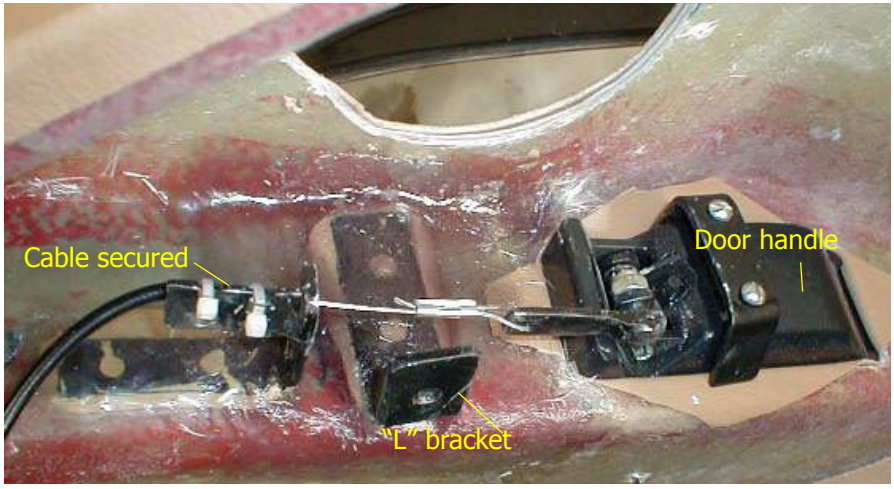
The cable from the door release is routed to the inside door handle. A special bracket is fabricated to hold the bicycle cable in place.





The door panel is bolted to the door frame with a special "L" bracket that is fabricated and bondoed to the inner door panel. The bolt it is secured to is a stud that has been welded to the inner door framework.


Cable holder
Door handle
"L" bracket
Cable to door release


Cable secured
Door handle
"L" bracket

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